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THE CHRONICLE
of Higher Education.

ISSN 0009-5982

November 9, 1988 • $2
Volume XXXV, Number 11

News Summary

Articles on inside pages

The Reagan Presidency and Higher Education

The nearly eight years of Ronald Reagan's Presidency have produced sweeping economic, social, and political change for the nation—and for higher education.

In a special report that begins on Page A22, six stories tell how individual colleges and universities—as well as Washington's lobbyists and lawmakers—have also changed in that time.

Scholars nourished on the politics of the 1960's are questioning what impact their research has had on public policy and law: Page A5.

College personnel officers, now involved in a wide array of employment issues, are getting the respect they say they deserve: Page A15.

A survey indicates that many student-affairs administrators see alcohol-related problems increasing on campuses: Page A35.

As a result of the professionalization of the sports industry, more colleges are offering sports management as an academic discipline: Page A39.

A proposal to end Britain's policy of tuition-free higher education has been considered by the government, documents suggest: Page A43.

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Fate of Accelerator Unclear as Selection of Site Approaches

Highly sought-after supercollider might not be built after all

By KIM A. McDONALD
WASHINGTON

With the federal government's long-awaited decision on a site for its Superconducting Supercollider expected within a few weeks, the ultimate question facing the seven states left in the competition is not where the $4.4-billion particle accelerator will be built, but whether it will be built at all.

Uncertainty over the next President's support of the supercollider and doubts about the willingness of Congress—in the face of the huge federal deficit—to commit to such an expensive venture have many of the most optimistic proponents of the project clearly worried.

"It's not going to be easy," said Henry M. Gandy, director of Texas's office of federal relations, noting that once a site for the supercollider is chosen, lawmakers from the losing states may withdraw their support.

"It's been an uphill fight so far," he added. "But I believe there is still significant support for the project among key members of Congress."

Millions of dollars have already been spent by each of the seven finalists in the

Continued on Page A8

16,242 ENTRIES IN ONE CATALOGUE

Colleges Try New Ways to Thwart Companies That Sell Term Papers

By THOMAS H. MOORE

Colleges across the country are making new efforts, both in and out of the classroom, to short-circuit companies that sell ready-made term papers. Sold under the guise of "editorial assistance," thousands of such papers are available on topics ranging from "Ethics in Education" to "Spinoza's Philosophy."

"The student who panics, who's under some intense deadlines, is the type that uses the companies," says David T. Ouimette, associate director of the student-conduct office at the University of Southern California.

Says Gary M. Galles, an assistant professor of economics at Pepperdine University: "In classes with long papers, there are only two weeks left in the term before the students know enough to write them. That breeds a lot of desperation."

Typical Cost: $7 a Page

Students who are inclined to purchase their papers have plenty of topics to choose from. For example, Research Assistance, a Los Angeles–based firm, publishes a hefty catalogue, the latest edition of which offers 16,242 papers in 141 areas. Each entry gives a one-sentence description of the paper and includes the number of pages, footnotes, and bibliographic sources.

Such "assistance" typically costs $7 a page for stock papers, while custom

Continued on Page A36

Revamping of Financial Aid Called Vital for Low-Income and Minority Students

By JEAN EVANGELAUF
WILLIAMSBURG, VA.

New or revamped financial-aid programs are vital if low-income and minority students are to enjoy wider opportunities, according to educators, researchers, and policymakers who met here to examine public policy and higher education.

While they disagreed over the extent to which financial aid had opened the doors to college for low-income and minority students thus far, they agreed that the current mix of grants and loans would not serve those students well in the future. They cited rapidly rising tuition fees, the soaring cost of student-loan defaults, and a growth in the numbers of minority and non-traditional students.

Money alone, they warned, would not be sufficient to insure that all students have the opportunity to attend the colleges of their choice. Public schools must provide better counseling to children and their parents, they said, and must assume more responsibility for helping adults prepare for higher education. Colleges and universities, they added, must offer a more hospitable climate to those from diverse backgrounds.

Some researchers also admitted that lit-

Continued on Page A37

New Tests Expected to Bring Dramatic Changes in the Way Prospective Teachers Are Assessed

By BEVERLY T. WATKINS
NEW YORK

The next generation of tests to certify schoolteachers will consist of multimedia packages, rather than pencil-and-paper examinations, say the education researchers who are developing them. The new tests will be given at different times during a teacher's education and career, make extensive use of new technology, and include ways to evaluate actual classroom performance.

All in all, the researchers predict, the new tests will dramatically change teacher assessment.

"I no longer think of the assessment of teachers as involving a single test or a battery of tests," said Lee S. Shulman at a conference here. "It is a process that unfolds and extends over time."

Mr. Shulman, an education professor who directs the Teacher Assessment Project at Stanford University, was one of several researchers who summarized parts of their work at a meeting convened by the

Continued on Page A36

Euthanasia an Increasingly Pressing Issue for Ethicists and Physicians

By DAVID L. WHEELER

A professor of surgery tells a story about an urgent call he got one night when he was young and working as an intern in a Cincinnati hospital.

A nurse told him he was needed on a ward that he was covering for a fellow intern. Upon arriving there, the young doctor was directed to the room of an elderly male patient who was blue from a lack of oxygen and near death. A cancerous tumor had pushed into the patient's windpipe, blocking his breathing.

The intern surgically opened a hole through the patient's neck into the windpipe and inserted a tube to let air in. The patient started to breathe. After he had regained consciousness, the patient reached for a pencil and a piece of paper.

"Why did you do this to me?" he wrote.

Significant Infection by AIDS Found Among College Students

Early findings of a national survey show AIDS has infected a substantial number of students: Page A2.

"I realized then," said George R. Dunlop, a professor of surgery at the University of Massachusetts medical center, "that there was more to medicine than keeping patients alive."

The agonizing question of when doctors should stop treating patients and when, if ever, they should step in to help patients die, is an increasingly important topic in medical ethics and legal scholarship. The medical technology available to prolong life is growing more sophisticated, while the government's ability to pay for that

Continued on Page A6

MARGINALIA

From *At Chicago*, a newspaper at the University of Illinois at Chicago:

"A 12-day tour of London highlighting the places where Charles Dickens lived and wroted will be sponsored Dec. 8-9 by the Scholarship Association for the University of Illinois at Chicago."

They'll know wot's wot, they will.

■

According to a memorandum at California State College at Bakersfield, October 16-22 was Campus Litteracy Awareness Week. Had something to do with trash, we gather, since October 22 was Litter Clean-up Day, on which, says the memo, "at 12:30 Carl's Jr. will host a pick nic."

■

From a letter in *Notices of the American Mathematical Society*:

"... In typing mathematics, one often makes the separation between text and formulas more clear by leaving double spaces around symbols: e.g., around the 'x' in

"If the element x has the above property

"I have found it useful to extend this to typeset text. E.g., I prefer

"If the element x has the above property

"rather than

"If the element x has the above property

"and suggest that this practice be made standard. . . ."

You'll hear no objection from *us*.

■

Memo circulated via electronic mail at Wayne State University:

"SUBJECT: 'On or about'

"'On or about July 1' can appropriately be construed to mean either a short while before July 1 or a short while after July 1. 'A short while' can appropriately be construed to mean as much as two weeks. Thus there is no problem with an individual going on the payroll anytime within the FOUR WEEK PERIOD comprised of the TWO WEEKS BEFORE THE DATE THRU THE TWO WEEKS AFTER THE DATE."

Thanks.

■

From a book note in *The Benchmark*, a newsletter from the New York State Education Department:

"*Women's Thesaurus* is a reference book that lists some 5,000 terms that cover the broad range of concerns shaping women's livers. . . ."

We'll leave it for the M.D.'s, if you don't mind.

■

From *The Chronicle*:

"The association is an organization of retired faculty members, their spouses, and their surviving spouses."

"An organization of retired polygamists, maybe?" a reader asks.

—C.G.

In Brief

U. of Richmond to Accept Freshmen for Law School

The University of Richmond plans to guarantee top prospective freshmen admission to its law school upon completion of their undergraduate studies.

Students in the top 10 per cent of their high-school classes who have a combined score of at least 1,300 on the Scholastic Aptitude Test will be admitted to the law school if they maintain a high B average in college.

The university hopes to attract undergraduates who have higher grades and get a more diverse law-school population, according to Ann S. Gibbs, the law school's assistant dean. The first students in the program will enter Richmond in the fall of 1990.

Depression Found Rising Among Medical Students

Medical-school pressures are causing a "troubling" rate of severe depression among students, according to a study published last week in the *Journal of the American Medical Association*.

The four-year study of about 120 medical students at a Midwestern university showed that between an eighth and a quarter suffered from serious depression in the first three years of medical school.

The study found that at least 12 per cent of medical students had "considerable depressive symptoms" at any point during their first three years of medical school. Only about 5 per cent of other people who are now between the ages of 18 and 24 will experience a major depression during their lifetimes.

The researchers from Northwestern and Rush Universities who conducted the study said 25 per cent of the medical students had signs of severe depression near the end of their second year of school—just before taking final exams and the first part of a national medical exam.

The researchers said they did not reveal the identity of the medical school in the study to protect the confidentiality of its students.

Workshops on Ethics Replace Classes for a Day

Florida International University last week canceled classes for one day so that students and members of the faculty and staff could attend a day-long series of workshops on ethics.

A spokeswoman said the workshops replaced the annual faculty convocation. Topics covered in the workshops included student cheating, science ethics, and ethics and the professoriate.

Missouri Official Sues 'Diploma Mill' for Fraud

The attorney general of Missouri has filed separate civil lawsuits against an alleged "diploma mill" and an accrediting agency operating in the state.

In the first lawsuit, Attorney General William L. Webster charges that the University of North America, Inc., is a "diploma mill," and not a legitimate educational institution. The state alleges that the university does not employ faculty members and claims to be accredited by a fictitious accrediting agency.

The St. Louis County Circuit Court ordered the university to cease operations pending hearings in the suit. Officials at the university could not be reached for comment.

In the second case, the attorney general accuses the International Accrediting Commission for Schools, Colleges and Theological Seminaries of Holden, Mo., of failing to evaluate colleges it accredits.

The state charges that the commission accredited a bogus business college set up by state attorneys who had listed the Three Stooges as advisers to the college.

The commission's lawyer, Susan Ellmaker, said the business college's accreditation was "provisional" based on the need to correct problems cited during an evaluation.

Explosives in Dorm Room Lead to Student's Arrest

A student at the University of Colorado has been given six months' probation and ordered to perform 100 hours of community-service work and write a paper on errors in judgment for storing explosives in his dormitory room.

Mark Borchelt, a sophomore engineering major, was arrested on charges of storing explosives without a permit and reckless endangerment. He has been permitted to attend classes, but not to enter any dormitory.

Students were evacuated from Mr. Borchelt's dormitory for three hours last month while police, acting on a tip, searched it. They found two sticks of dynamite, several bottles of explosive powder, and lengths of fuse, all belonging to Mr. Borchelt.

'Alternative' Newspaper Has Funds Restored

A student judiciary board has reversed a decision cutting off funds to an alternative student newspaper at California State University at Long Beach.

The Student Senate terminated funding for *The Union*, a weekly

AIDS Virus Found to Be Gaining on Campuses

Early data from a nationwide study of AIDS infection on college campuses "clearly establishes" that the virus has reached significant numbers of students, health officials said last week.

Gary Noble, deputy director for AIDS of the federal Centers for Disease Control, told a meeting of college newspaper editors that, among the first 5,000 blood samples tested for the study, 3 in 1,000 contained antibodies to H.I.V., the virus that causes AIDS. Other C.D.C. officials cautioned that the rate could rise or fall as more samples are tested.

'A Real Problem'

Even though incomplete, the figures "should once and for all wake people in higher education up to the fact that AIDS is a real problem on campuses," said Richard P. Keeling, who is director of the student health service at the University of Virginia and president of the American College Health Association.

The study, which is being conducted by the association for the C.D.C., will eventually test the blood of at least 20,000 students from 20 universities and colleges. It makes use of blood drawn for other reasons in selected college health services. The study is part of a larger effort by the C.D.C. to estimate the level of H.I.V. infection in the population.

Dr. Keeling said an initial analysis of the completed survey should be ready in January. —L.B.

STUDENTS AT STANFORD RALLY AGAINST RACISM

AP/WIDE WORLD

Cheryl Taylor, vice-chairwoman of the Black Student Union at Stanford University, speaks at a rally on the campus called to protest recent racial incidents there.

STANFORD, CAL.

A new organization formed to fight racism at Stanford University, called the Students of Color Coalition, staged a rally on the campus that drew about 400 participants.

The demonstration was called in the aftermath of two racist incidents: the defacing of a dormitory poster of Ludwig van Beethoven to resemble a stereotype of a black person, and the scrawling of the word "niggers" across a black fraternity's poster.

The protesters made several demands of the university administration, including the addition of Asian-American and Native-American studies programs; required ethnic studies for all students; and an increase in the size of the staff of the ethnic cultural centers, including the addition of full-time deans.

At the University of Massachusetts at Amherst, about 3,000 students, faculty members, and other members of the campus community formed a human chain to mark the second anniversary of a racial brawl there.

—ELIZABETH GREENE

The Chronicle of Higher Education (ISSN 0009-5982) is published weekly except the last two weeks in August and the last two weeks in December, at 1255 Twenty-Third Street, N.W., Washington, D.C. 20037. Subscription rate: $55 per year. Second-class postage paid at Washington, D.C., and at additional mailing offices. Copyright © 1988 by The Chronicle of Higher Education, Inc. Printed in the United States of America. POSTMASTER: Send address changes to The Chronicle of Higher Education, P.O. Box 1955, Marion, Ohio 43305. Member, Audit Bureau of Circulations. The Chronicle reserves the right not to accept an advertiser's order. Only publication of an advertisement shall constitute final acceptance of the advertiser's order.

paper, after it published a satirical edition with erotic drawings, which Roger Thompson, the student-government president, said showed poor taste. The newspaper missed four issues.

The judiciary committee ruled the senate could not cut off the newspaper's funds without going through a student publications board. Mr. Thompson said he would recommend that the senate not pursue the matter further.

Corrections

■ A list of college athletics departments against which sex-discrimination complaints have been filed in recent months (*The Chronicle*, November 2) incorrectly included the University of Maryland at College Park. A complaint has been filed against the University of Maryland–Baltimore County.

■ Because of incorrect information supplied by state officials to the Illinois State University Center for Higher Education, the state-appropriations figures for one California university and for all of public higher education in Kentucky were incorrect in the October 19 issue of *The Chronicle*. California State University—Dominguez Hills is actually receiving $35.6-million in state funds this year, a 16-per-cent increase from two years ago.

The following are the correct totals for the support of Kentucky's public universities from state tax revenue for the current year, along with the percentage increase over the total from two years ago:

	(In millions)	
Eastern Kentucky U.	$41.2	+ 7%
Kentucky State U.	$13.8	+ 7%
Morehead State U.	$24.9	+ 7%
Murray State U.	$30.8	+ 7%
Northern Kentucky U.	$21.5	+ 9%
U. of Kentucky	$183.3	+ 16%
U. of Kentucky community colleges	$38.7	+ 19%
U. of Louisville	$104.4	+ 11%
Western Kentucky U.	$40.5	+ 7%

When other state support is included, the total state budget for higher education is $518.4-million, + 13%.

Students at Yale's Management School Protest Major Changes in Curriculum

By MICHELE N-K COLLISON

Anxious students at Yale University's School of Organization and Management boycotted classes and staged demonstrations last week to protest major changes in the school's curriculum.

The protests came in the wake of the appointment of a new dean by Yale's president, Benno C. Schmidt, Jr. His selection of Michael E. Levine, a member of the management-school faculty, was seen by many students and some faculty members as a signal that the school might be moving away from its innovative approach to educating managers.

In its 12-year history, the School of Organization and Management has emphasized a humanistic approach to management and focused more than many of its competitors on teaching organizational behavior and group dynamics.

Following his appointment, Mr. Levine ordered a restructuring of the organizational-behavior department, which offers some of the most popular courses in the school. In addition, he announced that the contracts of six of the department's non-tenured junior faculty members would not be renewed and a doctoral program in organizational behavior would be discontinued. One faculty member quit to protest the changes.

Mr. Levine also announced that the operations-research department was being transferred to the university's College of Arts and Sciences.

Ideological Divisions

The school had been without a permanent dean since Burton G. Malkiel left for Princeton University in 1987. Students and faculty members say that ideological divisions within the faculty made it difficult to appoint a new dean.

"There was dissension within the school over the central question of how does one go about educating people for management careers," said Stephen A. Ross, professor of economics and finance. Mr. Ross said he was pleased with Mr. Levine's changes in the school.

But another faculty member said he was surprised at the restructuring. "I don't know in what direction the school will move now," said Eric V. Denardo, a professor of operations research.

'The School Was Divided'

"We aren't changing our basic mission," Mr. Levine said. "But we are changing the way we go about our mission by reducing the programs in experiential and clinical learning and emphasizing a broader view of organizational behavior."

However, many students believe the restructuring of the curriculum will lead to the elimination of the school's innovative approach.

"These two programs are the heart and soul of the school," said Allison R. Coleman, a first-year student. "The thing that sets Yale apart from other management programs is that they teach group skills and interpersonal skills."

In the furor over the changes in the school's curriculum, Mr. Schmidt has been criticized for appointing Mr. Levine without consulting the school's search committee.

"The school was badly divided about its direction, and I felt it needed to move in new directions," said Mr. Schmidt.

Mr. Schmidt also said that concerns about the direction of the school were unfounded. "Will the school look different? There's no doubt about it. But my aim is not to turn it into a conventional business school."

PORTRAIT

A Quintessential Scholar-Teacher Who Spurns Tenure

MITCHELL DIGIACOMO

David J. Helfand, who insisted on a renewable contract rather than accept Columbia's offer of tenure: "I made up my mind a long time ago that I wasn't going to participate in it, just like with the draft in the 1970's."

By KIM A. McDONALD
NEW YORK

Sitting through a lecture on supernova remnants may not sound like the most stimulating way to spend an afternoon, but listen to David J. Helfand and the subject will soon rivet you to your seat.

Pacing to and fro on the auditorium floor, Mr. Helfand explains how nearly all of the atoms in our bodies—down to our fingernails—were once forged within the hot interiors of stars. Some of those stars eventually fizzle into planet-sized embers and some—those that are 10 to 30 times the size of our sun—explode in a cataclysmic fireball known as a supernova.

It's all rather mind boggling, to hear Mr. Helfand describe it. A fraction of a second before this titanic explosion, he says, the star's iron core collapses, shrinking the equivalent mass of the sun into a sphere smaller than Manhattan.

The energy released in that sudden collapse blows most of the star apart. Fragments are hurled outward at 10,000 miles a second as the intense heat of the explosion transforms iron into heavier elements—gold, lead, and uranium.

'He Literally Enthralls Them'

Astronomers, Mr. Helfand says, "believe that nearly all of the elements heavier than hydrogen and helium which we see in the universe today were created in stellar interiors and subsequently distributed by supernova explosions."

That means, he adds, that "most of the atomic nuclei in your fingernail used to reside in the center of a massive star."

From the passion in his voice to the animation he puts into his lectures, Mr. Helfand, a professor of physics at Columbia University and chairman of its astronomy department, is inarguably a scholar who loves to teach.

"In David, you have the quintessential scholar and teacher that any research university would like to have more of," said Jonathan R. Cole, vice-president for arts and sciences at Columbia. "He captures the imagination of young people and literally enthralls them when he lectures. He's the kind of person who can convince people that they can make exciting lives for themselves in academia, instead of going off to Wall Street."

Not that teaching is Mr. Helfand's only forte. As a scientist, he has made significant contributions to the knowledge of supernova remnants, particularly of the dense neutron stars that emerge from the cores of supernovas.

He has also discovered a variety of pulsars—rotating neutron stars that appear in the sky like distant lighthouses, flashing beacons of radiation across the universe as rapidly as hundreds of times a second.

With the help of Robert Becker of the University of California at Davis, he is currently surveying a large segment of the Milky Way to find out why only a small fraction of supernova remnants have been discovered with pulsars nearby.

Mr. Helfand's hunch is that past surveys of supernova remnants have missed those with a higher proportion of pulsars and that a more complete survey may find them. He hopes to gain more insight from the pulsar that he expects will emerge from the shell of dust that now envelops Supernova 1987A, the closest and brightest exploding star to appear since the invention of the telescope.

"The fact that we don't see it yet is starting to get troublesome and may be related to the issue of the number of supernova remnants that don't have neutron stars," he says.

If the objects of Mr. Helfand's attention seem unusual, so too was the way in which he was drawn to them. It was, as he tells it, the result of his fondness for playing squash and his opposition to the Vietnam War.

From Drama to Physics

As an undergraduate at Amherst College, Mr. Helfand switched from drama to physics because rehearsals didn't leave him time to play squash. He began studying pulsars when he spent an extra year at Amherst to escape the draft, working on a radio telescope at the nearby Amherst campus of the University of Massachusetts.

"In 1970, they pulled draft numbers and mine was 12, and I was not about to go kill Viet Cong," he explains.

He received his doctorate in astronomy at Massachusetts in 1977, was offered a research position at Columbia, and rapidly moved up through the academic ranks, eventually receiving a tenured professorship in the physics department. But to the surprise of university officials, he turned down the offer of tenure, saying he opposed tenure because it bred mediocrity.

"I made up my mind a long time ago that I wasn't going to participate in it, just like with the draft in the 1970's," he says. "I was told, 'Well, the whole point of tenure is that you can hold these contrary views and that protects you while doing that, so obviously, what you want to do is to join the system and protest it from within.' "

A Review Every 5 Years

Mr. Helfand wanted no part in it. Instead, he persuaded Columbia to give him a renewable contract that required his teaching, research, and community-service activities to be reviewed every five years. It's a system to which, Mr. Helfand thinks, all faculty members at universities should be subjected.

"My contention is that we should hold people accountable to doing those things," he explains. "We want to choose people who will preserve and transmit the culture that we know and advance the frontiers of knowledge."

But the tenure system, he adds, attracts people who are content to rest on their laurels. At many research universities, he adds, the system also fails to select good or particularly dedicated teachers.

Although Mr. Helfand is disappointed that others at Columbia have not joined his tenure boycott, his strong conviction on the issue has won him many admirers.

"We all too often use the term 'role model,' but he holds the highest virtues of the transmission of new knowledge," says Mr. Cole. "He has shown an enormous dedication to the training of future scientists. In general terms, David is the kind of energetic young scholar who represents the best in American higher education."

Note Book

People facing discrimination because they have AIDS can seek legal help from students at Columbia University's Law School.

Sixteen law students enrolled in a course called "AIDS Law Clinic" operate what may be the first law-school clinic to represent clients in AIDS-discrimination cases, says Deborah M. Greenberg, a professor of law at Columbia. Ms. Greenberg teaches the course with Mark A. Barnes, an instructor.

"This is a developing area of the law," Ms. Greenberg says. "New York is second probably only to Los Angeles in the number of AIDS cases." People with AIDS have few legal resources available, she adds.

Students will advise clients in cases involving employment, housing, and health-care discrimination. Clients are referred by social-service agencies.

■

Summer associates at a New York law firm will be able to spend half their summer working for non-profit organizations under a policy intended to increase the number of associates who stay with the firm.

Any student asked to return for a second summer with the firm, Chadbourne & Parker, will have to spend only four weeks at the firm's office. The associates can work the remainder of the summer at a non-profit organization. Jerome C. Katz, a partner in the firm, says it will pay the difference between the salary at the non-profit organization and what the associate would earn at the law firm. Summer associates' salaries are expected to be $1,450 a week next summer.

"This is an innovative way to put good lawyers to work for non-profit organizations," says Mr. Katz. "It also is a good way to bring them back for another summer."

■

College students who start out with clear goals, pursue one course of study, and reside only in campus housing are not the ones most likely to stay in school and to graduate, according to research that challenges the popular notion of the ideal student.

A study conducted at the University of North Carolina at Greensboro found that students who never changed their major had the lowest graduation rates. Those who changed four times had the highest.

Students who had lived both on and off the campus during their college careers had higher retention and graduation rates than students who had lived only in on-campus or off-campus housing.

The old stereotype is a "sacred cow," said Bert Goldman, acting chairman of the Department of Educational Administration, Higher Education, and Educational Research at Greensboro. He and Jacqueline Gillis, a former research associate in the office of institutional research, tracked two classes of freshmen at Greensboro for five years.

Alcohol-Related Problems Have Not Decreased on Most College Campuses, Survey Indicates

Despite efforts to reduce abuse, only 24 pct. of administrators report situation has improved

By DENISE K. MAGNER

Most student-affairs administrators say alcohol-related problems on their campuses are increasing, or at least not lessening, despite greater efforts to reduce alcohol abuse.

A survey being released this week found that 35 per cent of student-affairs administrators thought campus problems involving alcohol had increased in the past several years, and 41 per cent saw no change. When a similar survey was conducted in 1985, 30 per cent said alcohol-related problems had increased.

Colleges are not ignoring the problem. Universities have substantially expanded their alcohol-education and prevention activities since 1985, the survey found. However, only 24 per cent of the officials said alcohol-related problems had decreased this year, compared with 28 per cent who said that in 1985.

'Clear, Strong Trend'

The College Alcohol Survey has been conducted every three years since 1979 by David S. Anderson, associate research professor at George Mason University's center for health promotion, and Angelo F. Gadaleto, associate professor at West Chester University's department of counselor, secondary, and professional education. Questionnaires were sent to student-affairs administrators at 330 institutions for the 1988 survey, and 213 responded.

The survey showed a "clear, strong trend" among colleges toward adopting tougher alcohol-abuse policies and offering more programs, Mr. Gadaleto said. At least 70 per cent of the institutions now offer group counseling for students who are problem drinkers or whose lives are negatively affected by an alcoholic. In

Continued on Page A37

COLLEGE ALCOHOL SURVEY

How Campus Policies Have Changed

	1979	1988
Drinking beer is permitted on campus	77%	78%
Drinking hard liquor is permitted on campus	62%	71%
Non-alcoholic beverages must be offered at public functions where alcohol is served	54%	92%
Food must be offered at public functions at which alcohol is served	24%	83%
Alcohol may be advertised as the primary focus of an event	49%	8%
Campus has alcohol-education and abuse-prevention efforts	69%	97%
Campus has a group effort, such as a task force or committee, that focuses on alcohol-education issues	37%	77%
Campus has a person who serves as an alcohol-education coordinator	14%	60%
Group counseling is available for students who are problem drinkers	33%	70%
A support group is available for students whose lives are being negatively affected by an alcoholic	21%	74%
New-student orientation deals with the subject of alcohol abuse	—	67%
Campus has an awareness week or day for alcohol education and prevention efforts	13%	90%

The Use of Alcohol and Drugs on Campus: Officials' View of Trends in Recent Years

	Great or some increase	No change	Great or some decrease
Abusive drinking	38%	40%	22%
Frequency of drinking	31%	49%	20%
Drunk driving	13%	41%	46%
Drinking in uncontrolled settings	48%	37%	15%
Alcohol-related behavioral infractions	35%	50%	15%
Use of false identification to purchase alcohol	58%	31%	11%
Use of marijuana	16%	52%	32%
Use of cocaine	40%	32%	28%
Use of PCP	7%	45%	48%
Use of hallucinogens	20%	38%	42%

Note: The figures are based on nationwide surveys of 330 four-year colleges and universities conducted by David S. Anderson and Angelo F. Gadaleto. The response rate in the 1979 survey was 50 per cent; the response rate in the 1988 survey was 64.5 per cent.

Officials Involved in Cutting Substance Abuse by Students Search for 'What Works'

Edward H. Hammond: "It's ludicrous on Saturday afternoon to ban alcohol from the student section, while the president is serving alcohol in the skybox."

ARLINGTON, VA.

Most college administrators, if asked, can quickly rattle off a list of things they need to prevent alcohol and drug abuse among students. Somewhere on it will be more money for programs and more leadership from university presidents.

But at the top is a want more basic than money and more elusive than leadership. Many of the 160 counselors and researchers who attended a forum on substance-abuse issues in higher education said they needed desperately to learn "what works."

Members of the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse gathered here for the forum, their first meeting since the group was organized a year ago. About 750 institutions have joined the network, which was formed to help colleges share information about drug and alcohol programs.

Many colleges are designing institutional drug and alcohol policies using the standards developed by the network this year. However, less guidance is available to administrators about successful prevention, education, and treatment programs, and many at the forum said their efforts often had a "hit-or-miss" quality.

"There is a tremendous desire to learn what works," said Stephen Nelson, dean of students at Bard College. "It comes out of a sense of frustration from hearing criticism and from seeing resources dry up."

'We Are Throwing Millions Away'

But officials looking for definitive answers are likely to come up short. "We are throwing millions of dollars away on good-faith efforts and programs that we *think* work," said Gerardo Gonzalez, associate professor of counseling at the University of Florida. "Little research is available on what actually works and under what circumstances. The irony is that we are research institutions—with no research on alcohol and drug abuse among college students."

A list of research needs was developed

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Revamping of Aid Called Vital for Minority Students

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tle was known about the effects of the financial-aid programs. The nation's complex system of student aid, which last year put a record $24.5-billion in federal, state, and institutional aid into the hands of college students, is something of a black box.

"We spend billions and billions of dollars on aid, but we don t know how effective it is," said Arthur M. Hauptman, a higher-education consultant. "During the Reagan-Bennett years, higher education has been under siege," commented Reginald Wilson, a senior scholar at the American Council on Education. "We haven't had the time to find out if what we've protected is worth protecting."

A Controversial Proposal

In a controversial proposal, Robert Zemsky, director of the Institute for Research on Higher Education at the University of Pennsylvania, recommended scrapping the present aid programs and redirecting that money to elementary and secondary education.

"Despite nearly two decades of massive investment in student-aid programs by both state and federal agencies, and the adoption by most institutions of largely open admissions policies, college participation rates have not substantially changed," Mr. Zemsky said at the conference, which was sponsored by the public-policy program at the College of William and Mary.

Mr. Zemsky based his conclusions on Census Bureau statistics covering the period from 1973 to 1986. They trace the college-participation rate of people aged 19 to 21 and the proportion of 19-year-olds who hold high-school diplomas. His analysis showed that while the participation rate of black women had grown over the period, it lagged behind that of white women. Among black men, the rate was essentially stable, remaining far below that of white men.

Examining the educational backgrounds of 19-year-olds, he found similar trends, with gains in the proportion of black women holding high-school diplomas and no significant increase among black men.

Using the same source of data, Mr. Zemsky also found that among white 19-year-olds, the college-going rate of men with lower incomes remained level over the period, while the rate for lower-income women increased gradually. Those men and women with lower incomes were less likely to attend college than those with higher incomes.

"One has simply to look at the unchanging graphs of college-participation rates over the last 15 years to conclude that federal and state programs have made no difference for black or lower-income males," Mr. Zemsky said. "The sustained increase for females, on the other hand, is true for all groups, suggesting that the increase is largely a function of the recent redefinition of female roles in American society."

Mr. Wilson disagreed with Mr. Zemsky's analysis and rejected his conclusion. Examining the behavior of a broader group—18- to 24-year-olds—shows the college-participation rate of blacks fell over the last 15 years while the proportion of blacks with high-school diplomas grew, he said. He said factors besides aid could affect the college-going rate, including shifts in social values and the enforcement of civil-rights laws.

"I don't want to get into a zero-sum game between elementary and secondary education and higher education," Mr. Wilson continued. "We need to do both, and we don't need to be choosing between them."

Better Distribution Sought

Said Mr. Hauptman: "Federal student aid has historically not been distributed in an efficient way. Perhaps the best that can be said is participation rates would have dropped without financial aid."

Rather than abandon aid programs, he urged the federal government to do a better job of directing aid to the neediest students and provide them larger grants, to simplify the process of applying for aid, to sponsor experimental programs to test new ideas, and to spend more on evaluating existing programs.

He and others also recommended that public institutions raise their tuition charges and use the additional revenue for need-based aid. "Low tuition is the primary vehicle for access, but it has detracted from the goals of choice and budgetary efficiency," said Mr. Hauptman.

Franklyn G. Jenifer, chancellor of the Massachusetts Board of Regents of Higher Education, said shifting money from the middle class would be difficult. "We need to reallocate money, but it's extraordinarily hard to do because most middle-class people think they have a tough time, and they do."

Sen. Paul Simon, Democrat of Illinois, condemned the shift from grants to loans as the primary source of student aid. "With respect to cost, loans are discriminatory," he said. "If you're a white male, you're going to earn more than if you're a female or minority."

He urged that spending on Pell Grants be increased, and that the program, which last year distributed some $3.7-billion to needy undergraduates, be made an entitlement. To help the middle class, Mr. Simon proposed that eligibility be eased for Stafford Loans, the government's largest aid program.

Warning of tight budget prospects, others at the conference said expanding the present aid programs was unlikely. "The deficit dominates the public-policy debate today like Vietnam did in the late 1960's," said Terry M. Hartle, chief education adviser to the Senate Labor and Human Resources Committee. "I don't think there will be more money for higher education."

U. OF PENNSYLVANIA

Robert Zemsky: "Federal and state programs have made no difference for black or lower-income males."

Alcohol-Related Problems Are Not Declining, Survey Finds

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1985, only half the campuses reported offering such support groups.

While alcohol-education and treatment efforts may be stronger, Mr. Anderson said, "with a few exceptions, drinking patterns of students remain the same."

His contention was backed up by a study released last week by Ruth C. Engs, associate professor of applied health science at Indiana University, and David J. Hanson, professor of sociology at the State University of New York College at Potsdam.

Ms. Engs and Mr. Hanson surveyed 3,375 college students in 1987-88 and found that the proportion who drank continued to decline slightly. The number of student drinkers has decreased slowly ever since states across the nation began raising the legal drinking age.

But the proportion of heavy drinkers—those who consume six or more drinks at one sitting more than once a week—has remained constant, at about 20 per cent. The proportion of underage students who drank was higher than that of legal-age students who drank.

Campuses Imposing New Rules

In other words, the overall decline means the Goody Two-shoes have stopped drinking," Ms. Engs said. "But they weren't drinking much in the first place. We found no change in problem drinking."

The number of institutions that allow students to consume beer and liquor on their campuses has hardly changed since 1979, according to the survey of student-affairs administrators. But the conditions under which alcohol is permitted on campuses have become more stringent, the survey found.

The number of colleges that allowed beer in dormitory rooms dropped to 58 per cent this year from 71 per cent in 1985. Meanwhile, the proportion of colleges allowing beer at the student union rose to 61 per cent in 1988 from 50 per cent in 1985.

> **"In other words, the overall decline means the Goody Two-shoes have stopped drinking."**

And more colleges allowed beer to be consumed outdoors on their campuses—41 per cent this year compared to 28 per cent in 1985. The same held true for hard liquor. The survey did not ask about wine.

"Colleges appear to be reducing the alcohol allowed in dormitory rooms and hallways and increasingly allowing it in student unions and places where it can be controlled," Mr. Gadaleto said.

Nearly half of the administrators said drinking in uncontrolled settings, such as private parties, had increased.

Alcohol-education coordinators, counselors, housing officials, and deans of students are leading the campaign to reduce substance abuse, the survey showed.

Two segments of the college community with perhaps the greatest daily influence over students—academic departments and intramural-recreation offices—provide the least leadership, the survey found. More than 80 per cent of the administrators said the departments and sports offices provided little or no leadership in alcohol education and prevention. And 65 per cent said student-government associations also provided little or none.

Alcohol prevention and education is offered by 97 per cent of the colleges surveyed. Since 1985, the number of institutions that employ alcohol-education coordinators has risen from 48 per cent to 60 per cent.

Despite those efforts, the survey found that alcohol was involved in campus problems with increasing frequency. It was a factor in more than half of the incidents that resulted in physical injury, violent behavior, violation of campus policies, and damage to dormitories and other campus buildings.

Substance-abuse programs offered by colleges must "counter millions of dollars in advertising and the strong role alcohol has in the American culture," Mr. Anderson said. "We need to be more creative in our efforts. We seem to want simple answers, and there are no simple answers."

Among other survey findings:

- Between 1979 and 1985, a growing number of administrators said alcohol-related problems were decreasing. Those numbers gave officials hope, but this year the trend was reversed.
- About 60 per cent of colleges now collect survey data about student drinking, compared to 44 per cent in 1985.

'What Works' in Fighting Drug Abuse

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by the forum and will be included in a report sent to the next President and Congress. The forum called for investigation of the causes and motivations behind student alcohol and drug abuse, of the abuse problems experienced by institutions of differing size and type, and of the costs and benefits of different programs.

In addition to the forum's report, the network itself is recommending that the U.S. Department of Education create a special panel to set the nation's research agenda for the struggle against drug and alcohol abuse, said Robert F. Ariosto, dean of student affairs at Central Connecticut State University.

"The research we have tends to be survey data," Mr. Ariosto said. "We need to look at the work that's been done and its effectiveness. Sketchy data indicate peer influence is good, but what is its real impact? How effective are some of these programs?"

Colleges must look beyond their own campuses and accept responsibility to study the reasons behind the pervasiveness of drugs in American society, said Gloria Scott, president of Bennett College.

"When an 18-year-old kid is found on the edge of campus with bullets in his head because of a bungled drug deal, when registration is interrupted because SWAT teams must move in on a drug sale, when do we deal with the source questions?" asked Ms. Scott, referring to incidents that she said had taken place at one Southern university. "The role of the academy is to explore this."

Counseling and Courses

Lacking research, officials at the forum said they were trying a range of tactics to persuade students to avoid drugs and alcohol, or at least to make responsible decisions when using alcohol.

Many programs use peer counseling to help students with alcohol or drug problems. Some institutions are offering academic courses on the subject for credit, while others are inviting police to give Breathalyzer demonstrations on campus.

Another effort cited as successful by some officials was called the "Donahue approach," in which students relate their experiences in question-and-answer sessions. One university even brought to its campus a wrecked car that had been involved in a drunken-driving accident, although most educators at the forum said such "scare tactics" were typically unsuccessful.

While administrators at the forum were interested in learning how to influence student behavior, most were not interested in assuming parental obligations. When Lee I. Dogoloff, executive director of the American Council for Drug Education, suggested that the answer to alcohol and drug abuse might be a return to *in loco parentis*, his idea was rebuffed.

Making 'Proper Decisions'

"To revert back to a time when students were considered 'children of tender years' would be a catastrophic response to the problem," said Edward H. Hammond, president of Fort Hays State University. Colleges and their presidents must recognize the severity of substance-abuse problems and create an environment on the campuses where students can learn to make "proper decisions," he said.

Substance-abuse policies and programs, to be effective, must address faculty members and alumni, and not simply focus on students, many administrators at the forum said.

For instance, Mr. Hammond said, at football games it would be "ludicrous to ban alcohol from the student section while the university president is serving alcohol in the skybox. At Fort Hays, the president gets Pepsi in the skybox."

At Saint Mary's College, traditions that had alcohol components have been redesigned, said President William A. Hickey. Instead of giving vintage bottles of wine to faculty members at Christmas, the college gives pen and pencil sets.

The tendency on campuses is to view alcohol and drug problems as the responsibility of student-affairs officers, making it difficult to arouse the interest of faculty members or university presidents, many administrators said.

Janet H. McKay, assistant provost at Princeton University, said that because faculty members operate autonomously, "they sometimes hesitate to refer students because they don't know services exist or they don't want to get involved."

Federal grants provided to colleges for drug prevention through the Fund for the Improvement of Postsecondary Education were lauded as a highly effective way to get an institution's program off the ground. However, many college officials whose drug-prevention grants were expiring said they feared their universities would not replace the financing unless the programs showed significant progress. But, they said, it was difficult to show change in one or two years.

—DENISE K. MAGNER

FACT FILE: Additional Tuition and Fee Data for 1988-89

The following are tuition and fees charged undergraduates at 278 colleges and universities for the 1987-88 and 1988-89 academic years, including, for 1988-89, the additional tuition that many public institutions charge to out-of-state students. The figures supplement a table of costs at 2,700 institutions that appeared in the August 10 issue of *The Chronicle*.

In addition to listing institutions not previously reported, the table includes corrected figures for the Kansas City Art Institute, Rutgers College of Rutgers University, the University of Illinois at Chicago, and the University of Pittsburgh main campus.

The figures in both tables were collected by the College Board in its Annual Survey of Colleges 1988, and the tuition report was prepared by the board's College Scholarship Service. (Copyright © 1988 by the College Entrance Examination Board. All rights reserved.)

	1987-88	1988-89	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
ALABAMA			
Alabama A&M U	$1,134	$1,134	$892
Auburn U main campus	1,323	1,323	2,646
Jacksonville St U	1,000	1,100	400
Troy St U main campus	1,200	1,260	630
U of Alabama			
Tuscaloosa	1,500	1,642	2,414
ARIZONA			
Arizona Western C	408	456	3,720
Mohave CC	294	480	3,270
Northland Pioneer C	120	144	2,300
Phoenix C	615	675	3,750
Rio Salado C	615	675	3,750
South Mountain CC	615	675	3,750
ARKANSAS			
U of Arkansas Monticello	1,100	1,155	1,490
U of Central Arkansas	1,080	1,080	1,050
CALIFORNIA			
California St U			
Bakersfield	734	792	4,680
Chico	754	804	4,680
Dominguez Hills	712	766	4,680
Fresno	766	816	4,680
COLORADO			
Adams St C	1,220	1,292	1,964
Aims CC	552	627	2,966
Colorado Sch of Mines	3,308	3,476	5,582
Colorado St U	1,800	1,897	3,686
CC of Denver	864	900	2,484
Fort Lewis C	1,836	1,911	4,731
Front Range CC	861	897	2,448
Mesa C	1,220	1,268	1,990
Morgan CC	816	852	2,448
Otero JC	930	966	2,448
Pikes Peak CC	856	906	2,448
Pueblo CC	860	895	2,448
Trinidad St JC	1,022	1,078	2,448
U of Colorado			
Boulder	1,860	1,924	5,878
Colorado Springs	1,375	1,506	3,034
Health Sciences Center	2,892	3,051	6,014
U of Southern Colorado	1,356	1,412	3,436
Western St C of Colorado	1,376	1,454	2,466
CONNECTICUT			
Central Connecticut St U	1,373	1,549	1,980
Eastern Connecticut St U	1,382	1,550	1,980
Southern Conn St U	1,238	1,388	1,980
DELAWARE			
Delaware St C	1,000	1,100	1,450
FLORIDA			
Brevard CC	660	720	720
Broward CC	642	688	750
Central Florida CC	660	683	690
Chipola JC	608	668	672
Daytona Beach CC	699	699	801
Edison CC	733	733	765
Florida A&M U	1,079	1,124	2,489

	1987-88	1988-89	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
FLORIDA—Continued			
Florida Atlantic U	$1,104	$1,206	$2,489
Florida International U	1,079	1,135	2,489
Florida Keys CC	600	660	660
Florida St U	1,100	1,130	2,489
Lake City CC	630	660	660
Miami-Dade CC	738	738	945
New C of U of South Fla	1,134	1,311	2,987
Okaloosa-Walton JC	600	600	600
Pensacola JC	728	728	667
Santa Fe CC	660	660	660
Seminole CC	690	690	630
Tallahassee CC	600	600	600
U of Central Florida	991	1,155	2,615
U of Florida	1,090	1,144	2,489
U of North Florida	1,111	1,128	2,489
U of South Florida	1,124	1,179	2,489
U of West Florida	1,082	1,116	2,489
IDAHO			
Boise St U	1,098	1,180	1,900
Idaho St U	1,000	1,000	1,900
Lewis-Clark St C	1,008	1,040	1,900
U of Idaho	1,042	1,048	2,000
ILLINOIS			
Columbia C	4,648	4,680	0
International Academy of Merchandising and Design	4,995	5,799	0
U of Illinois Chicago	2,202	2,697	3,540
IOWA			
Clinton CC	1,004	1,335	600
Iowa Central CC	1,098	1,198	550
Muscatine CC	1,004	1,335	600
Scott CC	1,018	1,328	600
KANSAS			
U of Kansas	1,325	1,380	2,430
Wichita St U	1,399	1,422	2,430
KENTUCKY			
Career Com JC of Business	3,375	3,725	0
Henderson CC	560	580	1,160
Kentucky St U	1,120	1,160	2,080
U of Kentucky	1,412	1,540	2,720
LOUISIANA			
Delgado CC	830	980	1,200
Grambling St U	1,208	1,508	1,350
Louisiana St U			
Alexandria	820	924	1,472
Eunice	830	890	1,500
Shreveport	1,200	1,320	1,920
McNeese St U	1,247	1,396	1,350
Nicholls St U	1,238	1,391	1,440
Northeast Louisiana U	1,248	1,413	1,140
Northwestern St U of La	1,335	1,479	1,350
Southeastern La U	1,231	1,484	1,440
Southern U Shreveport Bossier City	700	750	1,030
U of Southwestern La	1,231	1,323	1,650

	1987-88	1988-89	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
MARYLAND			
Chesapeake C	$686	$984	$3,126
MASSACHUSETTS			
Berkshire CC	940	1,038	1,920
Cape Cod CC	944	1,004	1,920
Holyoke CC	938	1,218	1,920
Massachusetts Bay CC	1,008	1,068	1,920
Massachusetts C of Art	1,486	1,594	2,556
Mass Maritime Acad	1,460	1,544	2,556
Massasoit CC	876	1,028	1,920
Mount Wachusett CC	897	1,080	1,920
Quincy JC	1,890	1,900	0
Quinsigamond CC	932	1,030	1,920
Salem St C	1,172	1,408	2,496
Springfield Technical CC	898	982	1,920
U of Lowell	1,528	1,770	2,904
Westfield St C	1,305	1,413	2,496
MICHIGAN			
Alpena CC	1,194	1,466	1,428
Grand Valley St U	1,632	1,794	2,406
Macomb CC	1,025	1,070	900
Michigan St U	2,546	3,090	4,129
Michigan Tech U	1,950	2,367	2,805
Oakland U	1,716	2,046	3,390
Saginaw Valley St U	1,725	1,995	1,935
U of Michigan			
Dearborn	2,098	2,324	4,664
Flint	1,700	1,954	4,306
Western Michigan U	1,618	1,866	2,657
MINNESOTA			
St Paul Tech-Voc Inst	1,538	1,335	1,305
MISSISSIPPI			
Coahoma JC	700	700	1,400
Delta St U	1,470	1,470	1,182
U of Southern Mississippi	1,675	1,675	1,182
MISSOURI			
East Central C	600	600	660
Kansas City Art Inst	7,800	8,200	0
Missouri Western St C	1,100	1,154	1,020
St Louis CC			
Florissant Valley	795	855	630
Meramec	795	855	630
MONTANA			
Western Montana C	1,167	1,167	1,458
NEBRASKA			
Kearney St C	1,169	1,239	690
Peru St C	1,142	1,238	690
Wayne St C	1,151	1,266	690
NEW JERSEY			
Burlington County C	935	935	2,200
Camden County C	934	1,020	60
County C of Morris	966	1,140	1,814
Kean C of New Jersey	1,590	1,756	600
Montclair St C	1,703	1,857	720
New Jersey Inst of Tech	2,944	3,220	2,600
Rutgers U Rutgers C	2,562	2,744	2,280
NEW MEXICO			
Albuquerque Tech Voc Inst	570	642	1,296
Northern New Mexico CC	432	468	948
Western New Mexico U	844	904	2,898
NEW YORK			
Corning CC	1,440	1,440	1,350
Dutchess CC	1,415	1,415	1,350
Herkimer County CC	1,260	1,345	1,225
Long Island U			
Brooklyn campus	6,815	7,355	0
Nassau CC	1,440	1,440	1,350
Rockland CC	1,275	1,380	1,300
Schenectady County CC	1,293	1,453	1,350

	1987-88	1988-89	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
NEW YORK—Continued			
St U of New York			
C at Purchase	$1,495	$1,530	$2,600
C of Tech at Alfred	1,485	1,485	2,600
C of Tech at Delhi	1,485	1,515	2,600
Maritime C	1,615	1,615	2,600
Westchester CC	1,493	1,493	2,025
NORTH CAROLINA			
Anson Technical C	242	244	1,881
East Carolina U	842	878	3,838
North Carolina A&T St U	889	899	3,838
North Carolina Central U	894	894	3,838
Pembroke St U	706	716	3,372
Rockingham CC	252	252	1,881
U of North Carolina			
Charlotte	779	821	3,838
Greensboro	989	1,053	3,954
NORTH DAKOTA			
Standing Rock C	1,270	1,570	0
OKLAHOMA			
Cameron U	765	1,043	1,485
Central St U	727	1,001	1,485
Connors St U	618	765	1,260
East Central U	746	1,020	1,485
Langston U	812	1,093	1,485
Mid-America Bible C	3,488	3,632	0
Northeastern Okla A&M C	573	720	1,260
Northeastern St U	758	1,020	1,485
Northern Oklahoma C	558	705	1,260
Northwestern Okla St U	730	1,014	1,485
Okla Panhandle St U	811	1,085	1,485
Oklahoma St U	974	1,274	2,340
Tech Branch-Oklahoma City	744	877	2,370
Rose St C	546	683	1,260
Southeastern Okla St U	731	1,020	1,485
Southwestern Okla St U	716	990	1,485
Tulsa JC	603	765	1,260
U of Oklahoma			
Health Sciences Center	1,081	1,276	2,805
Norman	1,000	1,264	2,340
U of Sci and Arts of Okla	716	998	1,485
Western Oklahoma St C	573	720	1,260
OREGON			
Eastern Oregon St C	1,452	1,512	0
Oregon St U	1,506	1,604	2,868
Rogue CC	720	720	2,295
Southern Oregon St C	1,521	1,596	2,451
U of Oregon	1,556	1,649	2,868
Western Oregon St C	1,503	1,569	2,451
PENNSYLVANIA			
California U of Pa	2,120	2,420	1,422
Cheyney U of Pa	2,095	2,190	1,422
East Stroudsburg U of Pa	2,034	2,334	1,422
Edinboro U of Pa	2,120	2,420	1,422
Indiana U of Pa	2,054	2,404	1,422
Lincoln U	2,130	2,350	900
Lockhaven U of Pa	1,995	2,310	1,422
Mansfield U of Pa	2,055	2,354	1,422
Millersville U of Pa	2,040	2,350	1,422
Pennsylvania St U			
Allentown	3,126	3,494	3,754
Altoona	3,126	3,494	3,754
Beaver	3,126	3,494	3,754
Berks	3,126	3,494	3,754
Delaware County	3,126	3,494	3,754
Du Bois	3,126	3,494	3,754
Erie Behrend	3,292	3,610	3,638
Fayette	3,126	3,494	3,754
Harrisburg	3,292	3,610	3,638
Hazelton	3,126	3,494	3,754
McKeesport	3,126	3,494	3,754
Mont Alto	3,126	3,494	3,754
New Kensington	3,126	3,494	3,754
Ogontz	3,126	3,494	3,754
Schuylkill	3,126	3,494	3,754
Shenango	3,126	3,494	3,754
U Park	3,292	3,610	3,638

	1987-88	1988-89	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
PENNSYLVANIA—Continued			
Wilkes-Barre	$3,126	$3,494	$3,754
Worthington-Scranton	3,126	3,494	3,754
York	3,126	3,494	3,754
Pennco Tech	4,365	4,800	0
Reading Area CC	1,254	1,320	2,520
Shippensburg U of Pa	2,066	2,396	1,422
Slippery Rock U of Pa	2,132	2,442	1,422
Thomas Jefferson U			
C of Allied Health Sci	8,500	9,200	0
U of Pittsburgh	3,486	3,836	3,880
West Chester U of Pa	1,985	2,350	1,422
Westmoreland Co CC	1,035	1,193	2,490
SOUTH CAROLINA			
Chesterfield-Marlboro Tech C	660	720	400
Clemson U	2,080	2,220	3,450
Lander C	1,820	1,970	450
South Carolina St C	1,450	1,450	1,530
Tri-County Tech C	800	800	588
U of South Carolina			
Aiken	1,400	1,600	1,740
Beaufort	1,200	1,350	1,520
Coastal Carolina C	1,400	1,600	1,840
Lancaster	1,200	1,350	1,520
Salkehatchie	1,200	1,350	1,520
Spartanburg	1,400	1,600	1,840
Sumter	1,200	1,350	1,520
Union	1,200	1,350	1,520
Winthrop C	2,070	2,070	1,586
TENNESSEE			
Austin Peay St U	1,227	1,282	2,736
Cleveland St CC	687	724	2,430
East Tennessee St U	1,134	1,202	2,736
Jackson St CC	687	726	2,430
Memphis St U	1,296	1,354	2,736
Middle Tenn St U	1,104	1,152	2,736
Motlow St CC	687	730	2,430
Nashville St Tech Inst	681	716	2,430
Roane St CC	687	724	2,430
St Tech Inst			
Knoxville	687	726	2,430
Memphis	684	718	2,430
Tennessee St U	1,148	1,202	2,736
Tennessee Tech U	1,190	1,281	2,736
U of Tennessee			
Chattanooga	1,228	1,282	2,734
Knoxville	1,404	1,466	2,734
Martin	1,254	1,330	2,734
Memphis	1,203	1,287	2,734
Volunteer St CC	687	726	2,430
Walters St CC	684	722	2,430
TEXAS			
Bee County C	300	330	3,344
Galveston C	292	422	480
Huston-Tillotson C	3,650	3,950	0
Laredo JC	484	484	910
Navarro C	680	680	156
VERMONT			
U of Vermont	3,440	3,726	7,050
VIRGINIA			
Christopher Newport C	1,920	1,630	1,030
Danville CC	763	783	3,031
Eastern Shore CC	772	788	3,031
George Mason U	1,824	2,040	2,196
Piedmont Virginia CC	763	789	3,031
Richard Bland C	1,260	1,350	1,980
Va Commonwealth U	2,315	2,415	3,100
WEST VIRGINIA			
Fairmont St C	922	970	1,580
Parkersburg CC	750	624	1,464
Southern West Va CC	600	624	1,464
West Va Northern CC	600	630	1,464
West Virginia St C	938	992	1,580
West Virginia U	1,316	1,400	2,130
Potomac St C	930	978	1,580

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